

## ABSTRACT OF THE DISCLOSURE

In the production method of polyamide of the present invention, the mole balance at a set point during melt polymerization is estimated from a pre-established equation for calculating the mole balance during melt  
5 polymerization from a melt viscosity. On the basis of the estimated mole balance, the subsequent conditions of melt polymerization of a batch and the polymerization conditions of the next and subsequent batches are determined. In addition, the mole balance, molecular weight and relative viscosity of melt-polymerized polyamide are estimated from pre-established equations each for  
10 respectively calculating the mole balance, molecular weight and relative viscosity at the end point of melt polymerization from the melt viscosity. The conditions for solid phase-polymerizing the melt-polymerized polyamide are determined on the basis of estimated values.